

CLAIMS

1. A welding system characterized in that a welding device in which a movable electrode is attached to moving drive means, the movable electrode and a fixed electrode forming a pair, and a part feeding device for feeding a part to a target position by a feeding rod moving forward and backward are integrated through a coupling member, so that an end position of the feeding rod moved forward and 10 an end portion of the movable electrode or the fixed electrode are in a predetermined relative positional relation.
2. The welding system according to claim 1, wherein a fixing member for fixing the welding device on a stationary member is provided.
3. The welding system according to claim 2, wherein:
 - the fixing member comprises a member main body and a fixed shaft member, which are integrated with each other;
 - the member main body is coupled to an end portion of 20 the moving drive means;
 - the fixed shaft member is coupled to the stationary member to fix the welding system on the stationary member;
 - an axis line of the fixed shaft member is approximately coaxial with a moving axis line of the movable electrode; and

a rotational position of the welding system can selectively be set by rotating the member main body with respect to the fixed shaft member.

4. The welding system according to claim 2 or 3,
5 wherein the coupling member is integrated with the fixing member.

5. The welding system according to any one of claims 1 to 4, wherein a plurality of part feeding devices each of which feeds a different type of part are attached to the
10 coupling member or an auxiliary member integrated with the coupling member.

6. The welding system according to any one of claims 1 to 5, wherein the part is a projection bolt with a flange which is provided with a projection for welding.

15 7. The welding system according to any one of claims 1 to 5, wherein the part is a projection nut provided with a projection for welding.

8. The welding system according to claim 1, wherein a support rod which is attached to the part feeding device
20 and extends approximately in a vertical direction penetrates a clamp block fixed on the stationary member and the clamp block clamps and loosens the outer periphery of the support rod to set the vertical position of the support rod, and an auxiliary clamp block for setting a moving
25 distance of the support rod in advance is disposed over

and/or under the clamp block in such a manner that the auxiliary clamp block penetrates the support rod.

9. The welding system according to claim 8, wherein the clamp block has a penetration hole through which the
5 support rod with a circular cross section penetrates, a slit section continued from the penetration hole, and a fixing bolt penetrating the slit section.

10. The welding system according to claim 8 or 9,
wherein: the auxiliary clamp block has a penetration hole
10 through which the support rod penetrates, a slit section continued from the penetration hole, and a fixing bolt penetrating the slit section; and an end face of the auxiliary clamp block can abut to an end face of the clamp block.

15 11. The welding system according to any one of claims 8 to 10, wherein the part feeding device is a device that feeds a part held by the feeding rod to the fixed electrode or the movable electrode of the welding device, in order to weld the part fed between the fixed electrode and the
20 movable electrode by the feeding rod to the target part.

12. A positioning device of a part feeding device wherein a support rod which is attached to the part feeding device and extends approximately in a vertical direction penetrates a clamp block fixed on a stationary member and
25 the clamp block clamps and loosens the outer periphery of

the support rod to set the vertical position of the support rod, characterized in that an auxiliary clamp block for setting a moving distance of the support rod in advance is disposed over and/or under the clamp block in such a manner

5 that the auxiliary clamp block penetrates the support rod.

13. The positioning device of the part feeding device according to claim 12, wherein the clamp block has a penetration hole through which the support rod with a circular cross section penetrates, a slit section continued 10 from the penetration hole, and a fixing bolt penetrating the slit section.

14. The positioning device of the part feeding device according to claim 12 or 13, wherein: the auxiliary clamp block has a penetration hole through which the support rod penetrates, a slit section continued from the penetration 15 hole, and a fixing bolt penetrating the slit section; and an end face of the auxiliary clamp block can abut to an end face of the clamp block.

15. The positioning device of the part feeding device according to one of claims 12 to 14, wherein the part 20 feeding device is a device that feeds a part held by the feeding rod to the fixed electrode or the movable electrode of the welding device, in order to weld the part fed between the fixed electrode and the movable electrode by 25 the feeding rod to the target part.